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ABSTRACT

This study examined how personnel issues raised by P.L. 99-457, Education of the Handicapped Amendments (1986) were being met in North Carolina in 1985 and 1988. Data were gathered from the statewide network of home-based intervention services (Early Childhood Service), providing information about 139 staff and consultants in 1985 and 135 in 1988. The study describes existing staffing patterns for the network, as well as the employment of related therapists and the involvement of physicians in early intervention services. Eight of ten disciplines specified by the law were found to be employed. Most interventionists were found to be female and Caucasian. A new program requiring an "initial infant specialist credential" be earned by many interventionists is also described. Contains 18 references. (PB)

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Staffing Infant Intervention Programs: One State's Status and Future Direction

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Executive Summary

Staffing Infant Intervention Programs: One State's Status and Future Direction

The eventual success of Public Law 99-457 is dependent on the availability of sufficient, qualified personnel to provide the intervention services. However, present and future shortages, as well as a substantial amount of turnover of early intervention personnel have been documented. Also, it has been determined that training programs of personnel currently working in the field are less than adequate in addressing the new domains of the law. Additionally, the role of currently employed interventionists has changed. Interventionists who have received a traditionally child-focused, discipline specific education are being asked to develop new skills and take on new roles.

Under P. L. 99-457 (Part H) each state is required to develop policies and procedures for personnel, including a comprehensive system of both preservice and inservice training. Each state will make these decisions based on its perception of the law, and the state's needs and resources. The purpose of this paper is to examine how the personnel issues are being met in one state with a long history of early intervention services. The intent is to offer one blueprint to other states as they wrestle with their personnel issues. The study employed information from North Carolina's statewide network of home-based early intervention services which operates under the North Carolina Department of Human Resources, Division of Mental Health, Developmental Disabilities and Substance Abuse Services (MH/DD/SS). The study described existing staffing patterns for the North Carolina

network. The study also addressed the employment of related therapists and the involvement of physicians in the Early Intervention Services. North Carolina's approach to training and credentialing early intervention personnel is also presented.

The current staffing pattern of North Carolina's network of Early Intervention Services found that eight out of the ten disciplines specified in the law were employed. Audiology and nutrition were the disciplines not represented as program employees. In January of 1988, special educators comprised approximately one quarter of the staff work force. Psychology, speech/language pathology, and education were the other primary disciplines represented. A study of Louisiana's early intervention teams revealed a similar personnel pattern. North Carolina's consultants were primarily allied health professionals; the greatest number of them were physical therapists. Disciplines employed in North Carolina that were not specified in the legislation included maternal and child health, child development, and sociology. The majority of North Carolina staff held bachelor's degrees. Master's degrees were held by the greatest number of consultants. The interventionists were primarily female and Caucasian.

Physicians were involved with the network of services as paid consultants and also in informal working relationships with the teams. The Division of Community Pediatrics at the University of North Carolina began operating a Community Outreach Training Program in 1982. This program trains fourth year medical students and first year pediatric residents to participate in early intervention services.

There is a particular concern in the field of early intervention related to employing allied health professionals. Although few in

number, North Carolina has been successful in employing therapists for their intervention programs. The majority are employed as consultants who work 2 to 20 hours a week. Employing allied health professionals in this manner appears to be effective and efficient when resources are scarce and the services of these specialists are needed by each program to serve a small number of children.

North Carolina has spent the last two years amassing information from various sources to establish what is referred to as an initial infant specialist credential. Based on four levels of training, interventionists are called on to have additional training in six areas. These six areas of new knowledge include: 1) Infant Development and Learning, 2) Screening and Assessment, 3) Intervention, 4) Family Support, 5) Interagency Collaboration, and 6) Related Services. Once credentialed, interventionists will be required to continue professional training by earning credits annually.

North Carolina has established an Early Childhood Staff Development component of MH/DD/SAS to assist in credentialing and to help ensure qualified interventionists. The Staff Development component had been charged with conducting statewide assessment of staffs strengths and needs, planning regional and statewide inservice training based on the assessment, mobilizing resources for providing the training, and finally evaluating the inservice activities to determine effectiveness.

States must attend to the recruiting and training of personnel to staff the intervention services. Each state will have to make decisions based on its needs and resources. North Carolina's approach to personnel issues offers one viable method which other states can examine as they

plan their policies. Careful attention to planning and implementing personnel issues is critical and will work to benefit the field.

In the fall of 1986, Congress legislated Public Law 99-457, a bold and challenging initiative for young handicapped children and their families:

> It is the policy of the United States to develop and implement a statewide, comprehensive, coordinated, multidisciplinary, interagency program of early intervention services for all handicapped infants, toddlers and their families (P.L. 99-457, para. 671).

The law specifies ten disciplines central to intervention: special education, speech/language pathology, audiology, occupational therapy, physical therapy, psychology, social work, nursing, nutrition, and medicine. To underscore the key role of personnel, three of the law's 14 minimum components address the issue of personnel requirements. States must plan and implement the following:

1. A comprehensive multidisciplinary evaluation of needs of children and families;
2. A comprehensive system of personnel development (including both preservice and inservice training with an interdisciplinary focus and addressing the needs of a spectrum of providers); and
3. Policies and procedures for personnel standards.

The law also expands the traditional role of the interventionist into unfamiliar but pivotal areas: assessing the strengths and needs of families, developing the Individualized Family Service Plan (IFSP), establishing a case management system, and coordinating between and among agencies. These new domains require training of new personnel and the retraining of interventionists who have received a traditionally child-focused, discipline specific education.

The law's eventual success may be gauged in part by the availability of sufficient, qualified personnel to provide adequate services to the identified population. Present and future personnel shortages, however, have already been documented and pose a major impediment to providing intervention services (Meisels, Harbin, Modigliani, & Olsen, 1988). The U.S. House of Representatives' version of P.L. 99-457 cited inadequate training as a glaring obstacle to the measure's infancy component (Campbell, Bellamy, & Bishop, 1988). Attrition of currently employed interventionists will contribute to the problem (Palsha, Bailey, Vandiviere, & Munn, in press). In addition, current training programs are less than adequate in addressing the new domains of the law. Bailey, Palsha, and Huntington (1990) uncovered the paucity of curriculum content related to infants or families in traditional undergraduate and graduate special education programs. Similar inadequacies were found in the training programs of seven other disciplines which work with infants and their families (Bailey, Yoder & Huntington, in press). These investigators stressed the need for quality and effectiveness of both preservice and inservice training to meet the growing demands for trained personnel.

States attempting to staff service delivery systems effectively are confronted with the mandated facets of the law that pose complex and critical policy issues (Bailey, 1989; Gallagher, Harbin, Thomas, Clifford, & Wenger, 1988). These issues include identifying specific skills required by interventionists; assessing the variability of personnel preparation across disciplines; addressing interdisciplinary needs, skills, and competencies, particularly within an inservice framework; and

weighing whether to license or certify personnel and, if so, by what requirements or standards.

One approach to addressing these issues is to examine how these personnel problems have been addressed in existing infant and toddler programs. Who currently staffs early intervention programs? Are the teams multidisciplinary? Are there identifiable staffing patterns? What disciplines are drawn to the field of early intervention? What options might be used to attract related therapists (e.g., physical and occupational therapists) who are in demand from competing populations? How can a state actively involve physicians in the implementation of the law? In terms of professional training, how qualified are those presently providing services? How is professional knowledge systematically being renewed in the field? What steps are being taken to credential presently employed infant interventionists? Are there inservice training provisions for currently employed interventionists?

These are questions this paper proposes to answer from one state's perspective. First, this paper will describe the staffing pattern of North Carolina's statewide, coordinated, home-based infant-intervention system. Second, the paper will compare North Carolina's staffing patterns with the staffing patterns of a group of infant interventionists working in Louisiana. Third, it will explore how North Carolina intervention programs employ related therapists. Finally, it will outline North Carolina's plan to guarantee the availability of qualified, credentialed infant specialists and its approach to providing quality inservice activities.

Procedures

Background

North Carolina's long history of infant intervention service delivery has much to offer other states as they struggle with the task of recruiting, hiring, retraining, and certifying infant-intervention personnel. Seventeen years prior to the passage of P.L. 99-457 North Carolina provided home-based, early intervention programming for handicapped and at-risk infants, toddlers, and their families. Early intervention services are among the oldest community programs in the state. They are operated under the auspices of the North Carolina Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (MH/DD/SAS). The evolution of these programs has been dynamic and ongoing. Given this history, it is logical that the North Carolina Department of Human Resources, Division of MH/DD/SAS has been designated as the lead agency for Part H of P.L. 99-457.

Setting

In 1985 the 29 existing intervention teams provided home-based intervention services to 1,948 children and their families in 71 of North Carolina's 100 counties (Vandiviere, Munn, Sabula, & Bell, 1986). Eighty percent of the children were in the birth-to-three-year age range. Thirty-seven percent of the children were classified as high risk; 34% were identified as having some form of mental retardation (moderate to profound); 23% had other disorders, including blindness, deafness, orthopedic impairments, and health problems; and 6% had no reported diagnosis. In 1985 the 28 programs involved in this study had been in operation for an average of 8.5 years (a range of 2 to 17 years). Teams

ranged in size from two to twelve professionals. In 1989 there were 41 ECIS teams serving all 100 counties in the state.

The teams involved in the study were composed of professional staff, consultants, and directors. The professional staff were full-time, permanent team employees who provided direct services. Consultants were part-time personnel whose services were contracted by individual programs. These interventionists provided some direct services but also acted as consultants to the staff. Directors were responsible for administering the programs. Depending on the program, the director's responsibilities varied from administration and direct services to full-time administration.

Method

Demographic information on early intervention personnel was collected in North Carolina and Louisiana. In North Carolina, in May 1985 and January 1988, directors of 28 of the then existent 29 Early Childhood Intervention Service (ECIS) teams completed surveys that provided information about all staff and consultants (N=139, 1985; N=135, 1988), including themselves. The information collected from these surveys included race, gender, highest degree earned, and educational background. These surveys were examined to determine the staffing pattern of the state's programs.

In February 1988, training workshops were conducted in three Louisiana cities. Attending interventionists completed forms which provided demographic information similar to the North Carolina survey and thereby presented another example of early intervention staffing patterns.

To provide information on employing allied health professionals and physicians in early intervention, directors from four of North Carolina intervention programs participated in face-to-face interviews. Each interview included a review of North Carolina's proposed infant credentialing guidelines and of inservice training activities. Credentialing information was augmented by a review of North Carolina's Initial Infant Specialist Credentialing document (North Carolina Department of Human Resources, 1989)

The Staffing Pattern

North Carolina

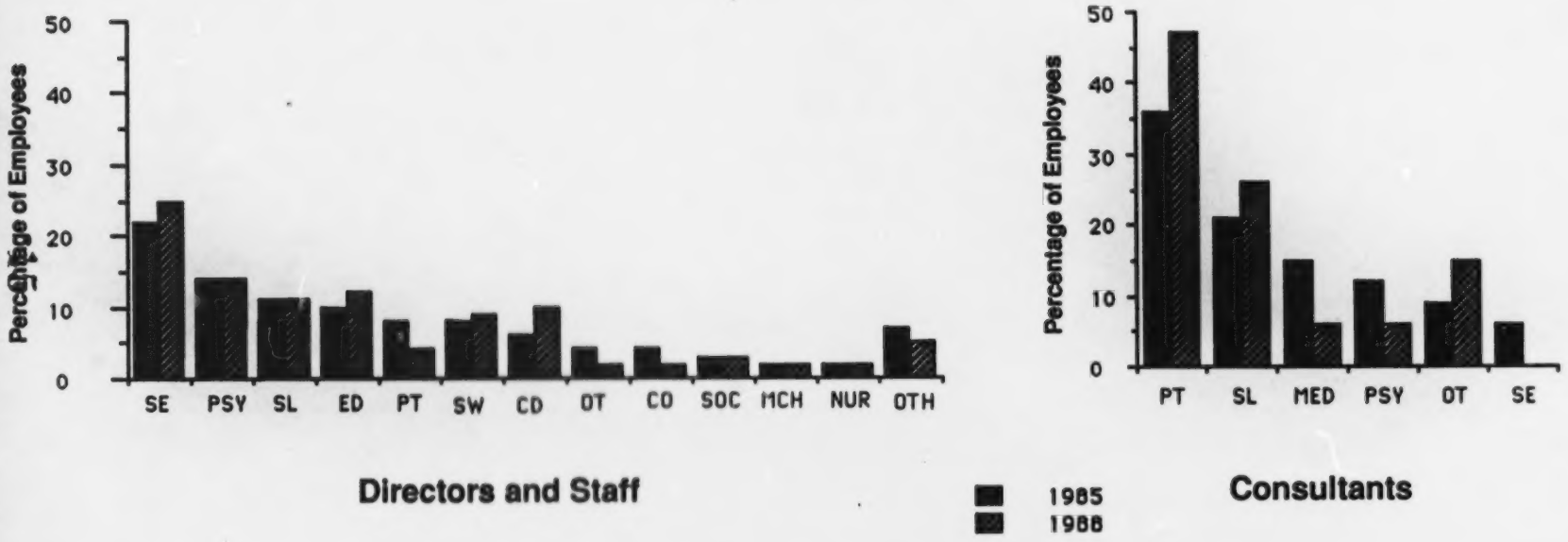
Figure 1 summarizes the educational backgrounds of the staff and consultants in May 1985 (N=139) and January 1988 (N=135). There were four primary disciplines represented by the staff for both years: special education (23% 1985; 24% 1988), psychology (15% and 14%), speech/language pathology (11% both years), and education (10% and 12%). Consultants were primarily allied health professionals.

Over one-third of the consultants were physical therapists in 1985; almost half (46%) in 1988. Speech/language pathologists, a major staff component, were also well represented as consultants: 20% in 1985; 25% in 1988. The greatest decrease as consultants occurred in medicine (i.e., physicians). In 1985, 15% of the consultants were physicians; by 1988, their ranks had diminished to 2%. Conversely, occupational therapists increased from 9% in 1985 to 14% in 1988.

The majority of the staff held Bachelor's degrees (55% in 1985 and 53% in 1988). A prominent number in both years, however, had Master's degrees (41% and 46% respectively). Those staff with Associate degrees

Figure 1. Educational Training of North Carolina Interventionists

May 1985 and January 1988



LEGEND:

SE = Special Education
PSY = Psychology
SL = Speech/Language
ED = Education
PT = Physical Therapy
SW = Social Work
CD = Child Development
OT = Occupational Therapy
CO = Counseling
SOC = Sociology
MCH = Maternal & Child Health
NUR = Nursing
MED = Medicine
OTH = Other

were least represented (1% in each year). The staff interventionists were primarily female (92%, 1985; 93%, 1988) and Caucasian (87% and 84%) in both years surveyed.

Consultants, on the other hand, mostly held Master's degrees (38%, 1985; 46%, 1988) compared with Bachelor's degrees (26%, 1985; 40%, 1988). For both years, a small number of consultants had MD's or PhD's. Paralleling the information about the staff, consultants were also predominantly female (70% and 85% respectively) and Caucasian (97% for both years). (See Table 1.)

Of the 28 teams surveyed, the team composition for 1988 ranged from two to eleven staff members. Only two teams were without either special education or early childhood education personnel. However, both of those programs had a team member with a degree in child development. Teams contracting with consultants had at least three staff members. There were one to five consultants for those teams having consultants.

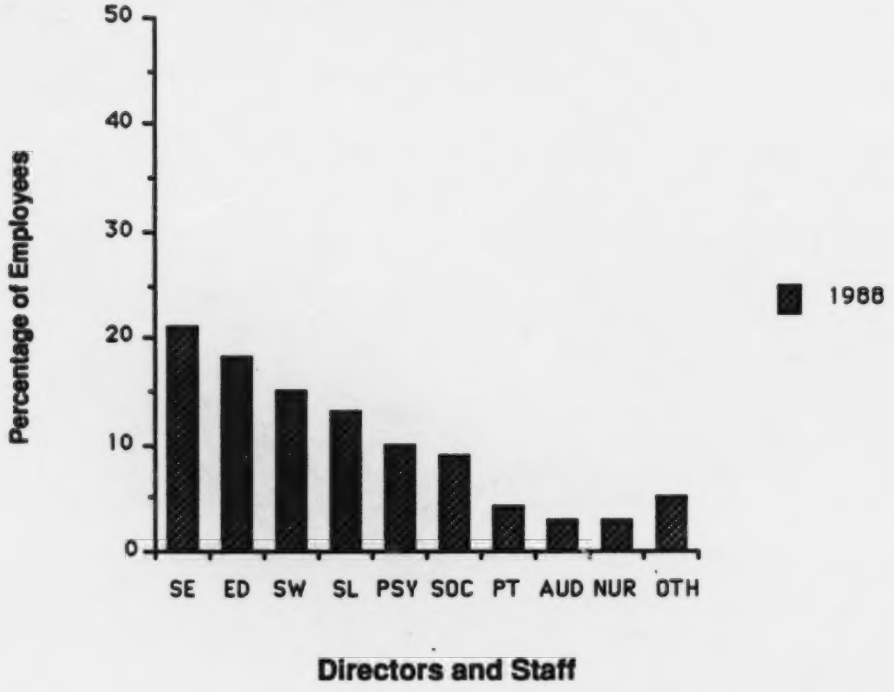
Louisiana

Louisiana also has a long history of providing early intervention services. The staffing pattern based on a sample of infant interventionists (N=78) in the state is comparable to North Carolina's. Like North Carolina's personnel, Louisiana's interventionists were predominantly from special education (21%). Education (18%), social work (15%), speech/language pathology (13%) and psychology (18%) were the top five disciplines; sociology at 9% was also well represented (see Figure 2).

Because there were only four consultants attending the Louisiana inservice training, computing meaningful categorical percentages for this

Figure 2. Educational Training of Louisiana Interventionists

February 1988



LEGEND:

SE = Special Education	SOC = Sociology
ED = Education	PT = Physical Therapy
SW = Social Work	AUD = Audiology
SL = Speech/Language	NUR = Nursing
PSY = Psychology	OTH = Other

group was not possible. However, three disciplines were represented: audiology, education, and speech/language pathology.

The majority of Louisiana interventionists in this sample held Master's degrees (51%). Forty-four percent held Bachelor's degrees; 3% had Associate degrees with an additional 3% holding Doctorates. The interventionists were primarily female (97%) and Caucasian (90%) (see Table 1).

Employing Related Therapists

There is a particular concern about the shortage of allied health professionals to work in early intervention services (Meisels, et al., 1989; Yoder & Coleman, 1990). Inadequate funding resources also may inhibit early intervention programs from hiring related therapists as full-time employees. However, the specialized services of these professionals may be needed by only a small number of the infants and children served in each program. Therefore, part-time work or a consultation model for employing allied health professionals may be both efficient and cost effective. Although few in number, North Carolina has been successful in employing physical and occupational therapists and speech-language pathologists as consultants. These professionals work on the teams two to 20 hours a week by providing direct services and by training other team members in specific techniques. Programs fortunate enough to be located near universities that train allied health professionals often serve as clinical training sites, and thus receive additional professional services.

Finding psychologists and pediatricians as members of the teams was encouraging, if rare. Directors who were interviewed revealed that

the contributions of psychologists and pediatricians exceeded their billed services. Many of the teams established an informal working relationship with a psychologist or pediatrician in their town whom they may telephone for consultation free of charge. Program directors believed that the effort to establish this relationship was invaluable. For the successful implementation of P.L. 99-457, it is critical to have physicians involved not only with the health care of eligible children but also in the referral of children to other community early intervention services.

Those North Carolina ECIS programs in close proximity to pediatric training institutions involved residents in practicum rotations with their teams. To enhance awareness of early intervention services, one director annually presents at pediatric grand rounds at the local university medical school. In 1982 the Division of Community Pediatrics at the University of North Carolina at Chapel Hill instituted the Community Outreach Training Program in which fourth-year medical students and first-year pediatric residents participate in various community programs, particularly in early intervention, as part of their practicum rotations. This experience may be the first contact many of these students have with community agencies. Learning objectives for the trainees include "knowledge of psychological, social, cognitive, and motor development; understanding and appreciation of the complex influence of the environment on growth and development; awareness of the availability of nonmedical resources that promote health and welfare of children; and ability to communicate with non-medical personnel and parents to improve the coordination of services to normal children and those with special needs" (Sharpe & Lorch, 1988, p. 317). Activities for

the trainees include accompanying interventionists, as observers, on home visits and observing preschools for the visually and hearing impaired. Trainees also provide an evening of respite care for a family with a handicapped child. In the first three years of the program approximately 100 students and residents were trained.

Inservice Education and Certification for Infant Interventionists

Another key issue in staffing infant intervention is how to keep personnel abreast of emerging information and research involving state-of-the-art practices.

> . . . [S]ince knowledge is rapidly changing with respect to working with young handicapped children and their families, policy makers will need to consider alternatives for ensuring that professionals are aware of and implement currently accepted best practices in early intervention (Bailey, 1989, p. 99).

The level of personnel training in a broad service delivery program may not parallel professional association standards. Although 46% of the North Carolina teams' interventionists held Master's degrees, 53% held a degree at only the Bachelor's level. Authors of a recent survey on the content of generic special education training programs questioned the viability of undergraduate training to prepare infant interventionists adequately (Bailey, Palsha, & Huntington, 1990). This, in turn, causes doubt that the eleven North Carolina interventionists with undergraduate degrees in psychology were sufficiently trained to work with infants and

their families. In a statewide study of Indiana's early intervention personnel force, Kontos (1989) similarly found teachers and administrators with degrees unrelated to their positions and titles and with little evidence of specialized training. These data point to the need for an approach to upgrading the professional skills of early childhood staffs.

Privileging Infant Specialists

The state of North Carolina has worked diligently over the last two years, amassing input from many sources, to establish certification guidelines for early childhood interventionists (North Carolina Department of Human Resources, 1989). North Carolina is one of only three other states to have established specialized credentials for professionals specific to the birth-to-three-year old population (Bruder, Klosowski, & Daguio, 1989). Although professional certification requirements will not guarantee professional quality, appropriate minimum requirements can go a long way towards achieving this goal. An additional benefit is that certification standards convince training institutions that the state is serious about quality training and that these institutions can plan on an identifiable client group for their training programs.

North Carolina's "Initial Infant Specialist Credentialing for Professional Personnel" is summarized briefly below. This process is based on four levels of training and education. Those holding degrees in nonrelated fields such as recreation and sociology will compose Level 1 and will be required to earn 18 credits for certification. Interventionists who have degrees in related fields (e.g., nursing, social work, and psychology) represent Level 2 and will need an additional 14 credits.

Level 3 includes those with degrees in early childhood education, special education, and child development; these interventionists will be required to earn nine credits. Level 4 pertains to individuals who are certified in preschool special education by the North Carolina Department of Public Instruction. Interventionists holding this certification who completed a practicum with infants and toddlers with handicapping conditions are not required to have additional training hours. A summary of the four levels and credit hours needed for initial certification is found below in Table 2.

Table 2. Summary of Initial Infant Specialist Credentialing

Levels	Degree currently holding	Credit hours required
Level 1	Non-related fields (e.g. Recreation & Sociology)	18
Level 2	Related fields, (e.g. Nursing, Social Work, Psychology)	14
Level 3	Special Education & Early Childhood Education	9
Level 4	Preschool Special Education	*0

*Must have practicum/work experience with infants or toddlers.

Non-experiential credits will come from training in six phases. These phases include: 1) Infant Development and Learning, 2) Screening and Assessment, 3) Intervention, 4) Family Support, 5) Interagency Collaboration, and 6) Related Services. Table 3 displays the schedule for acquiring credits for the initial credential.

For initial credentialing only, interventionists may also receive a maximum of four credits for experience (one credit for each year of working with handicapped infants and their families). Once credentialed, interventionists will be required to continue professional training by

earning three credits in any phase or combination of phases annually. This process does not apply to allied health professionals licensed by their professional organizations. The local area MH/DD/SAS authority, or its contracted agencies, will serve as the privileging agent.

Table 3. Number of Credits Required Across the Six Phases at Levels 1-3 for Initial Infant Certification

	Phase	Level 1	Level 2	Level 3
1.	Infant Development & Learning	4	2	1
2.	Screening & Assessment	2	2	1
3.	Intervention	5	4	2
4.	Family Support	5	4	3
5.	Interagency Collaboration	1	1	1
6.	Related Support Services	1	1	1
Total Credit Hours Required		18	14	9

Based on the personnel employed with the 28 North Carolina ECI programs in January, 1988, 79 of the 101 staff and directors need additional training to qualify for initial infant specialist credential. Eighteen of the interventionists hold allied health degrees and would not be required to work toward certification. Five of the interventionists qualify for certification based on holding a Master's degree in early childhood special education and having work experience with infants and toddlers. Forty-three interventionists would be at Level 3, 26 at Level 2 and 9 at Level 1.

Inservice Training

To train effectively in the six credential phases and to help guarantee having competent personnel to work in the programs North Carolina has established an Early Childhood Staff Development component of MH/DD/SAS. The functions of the staff development section are:

1. to carry out statewide assessment of the staffs' strengths and needs to perform their duties competently
2. to plan regional and statewide inservice based on the assessment that will improve the staffs' level of performance
3. to mobilize resources for providing the inservice
4. to evaluate the staff development activities to determine effectiveness (Perrotta, 1989).

There are numerous resources across the state for providing inservice activities. The Developmental Disabilities section of MH/DD/SAS has a long-standing agreement with the Intervention Network Technical Assistance Center (INTAC), a component of the Family, Infant, and Preschool Program, to provide inservice training. Formerly referred to as the Technical Assistance Program -- Intervention Network (TAP-IN), INTAC was created in 1977, indicating inservice training has been a visible priority to North Carolina for years. In addition to providing quality inservice, INTAC coordinates a clearinghouse, offers consultation, and operates a lending library of journals, books, and videos. A monthly INTAC publication features state-of-the-art information, book and journal reviews, conference announcements, and position vacancies. INTAC recently published a resource guide "An Orientation to Early Intervention Services in North Carolina" which includes such items as an overview of PL 99-457, evaluation and measurement techniques, and

definitions and characteristics of various handicapping conditions (TAP-IN, 1989).

INTAC has offered two-day workshops, facilitated by both in-state resources and prominent out-of-state presenters. Past topics included teaching strategies with developmentally disabled infants and children; empowerment strategies for parents of handicapped children; and assessment of young handicapped children. In addition to the opportunity to gain new information, the workshops act as a forum for interventionists to exchange techniques and ideas and to build and strengthen professional networks. INTAC also participates in the quarterly directors' meeting, providing another venue for assessing professional needs. When requested, INTAC sends a five-member team for two days to perform an on-site program review. The INTAC team interviews interventionists, accompanies them on home visits, reviews records, and evaluates the program's overall strengths and weaknesses.

Other state resources the Early Childhood Staff Development office, uses for providing quality inservice training are other components of the Family Infant and Preschool Program (FIPP), the Frank Porter Graham Child Development Center, including the National Early Childhood Technical Assistance System (NEC*TAS) and the Carolina Institute for Research on Infant Personnel Preparation. Also, the services of the Area Health Education Centers (AHECs), Department of Public Instruction, Division of Exceptional Children, Department of Human Resources, Divisions of Social Services, for the Deaf and Hard of Hearing, and Services for the Blind, Division of Maternal and Child Health of the Department of Environment Health and Natural Resources, Community Colleges, and Universities have and will continue to be utilized.

North Carolina's Interagency Coordinating Council has taken an active role in the area of staff development. One of their standing committees is the Personnel Development Task Force. This group has been involved in a number of activities to assist the Division of MH/DD/SAS and the North Carolina State Department of Public Instruction Exceptional Children's Services with personnel needs. Activities to date have included conducting a needs assessment of training issues and organizing a working conference to address all related inservice and preservice training plans. A product of the Task Force has been the generation of a five year comprehensive personnel development plan.

North Carolina's staff development planning efforts appear in keeping with Winton's (in press) recommendation of a "systemic approach" to inservice training. The implementation of their plan will be of course a critical component. The three major components of the "systemic approach" include: 1) training planned and executed from an ecological perspective; 2) training based on trainee's perceived needs, values, and goals; and 3) training that empowers interventionists to continue the change process in the workplace.

Discussion

The data presented suggest that the North Carolina early intervention network is performing in the spirit of P.L. 99-457, with teams of staff and consultants from multiple disciplines working together to serve infants/toddlers and their families. North Carolina interventionists in the study were predominantly from special education, psychology, speech/language pathology, and education. In addition, physical and occupational therapists were involved in the delivery system. Disciplines not specified in the legislation were also found on

the staff. Graduates in child development and maternal and child health may be very appropriate team members and should be recruited by early intervention programs. Given additional training, other prospective employees appear to include graduates in guidance and counseling, recreational therapy, and sociology.

Allied health professionals may be hired as consultants when inadequate resources or a limited need for specialized services preclude full-time employment. Programs in a position to offer their agencies as clinical training sites for related therapists or pediatric residents see this as a valuable opportunity to draw these professionals into early intervention. This opportunity is important for the student, whose course work is supplemented by practical experience. This exposure also may attract students who were otherwise unaware of early intervention as a career option. Programs additionally will benefit from collaborative relationships with community pediatricians.

Audiologists and nutritionists are the only disciplines specified by law that are not currently employed by North Carolina programs. This, however, does not necessarily indicate that they are uninvolved in intervention services. When necessary, parents are referred to audiologists by the team. Parents eligible for the Women, Infant, and Children (WIC) program receive the services of nutritionists. The ECIS teams also have access to the nutrition consultation services of the Division of Maternal and Child Health Services. A study is currently underway to further explore nutritionists' services with the ECI network (Bellamy, in preparation). In addition, although few nurses are employees, the ECIS team works closely with public health nurses, who make many of the initial referrals. The interventionists also work with

the nurses assigned to "at-risk" infants through the North Carolina High Priority Infant Tracking Program established statewide in 1979.

The new mandates of the law concerning families make inservice education an immediate necessity. Certification of infant specialists will no doubt continue to receive careful consideration. North Carolina's new infant specialist policies and procedures will allow all disciplines to remain involved in early intervention, but require a level of competency in specified areas necessary to perform as an infant interventionist. Also, the establishment of a statewide staff development component further emphasizes North Carolina's commitment to having quality personnel who will staff their intervention services.

P.L. 99-457 presents a new national agenda aimed at expanding and improving the services for young handicapped children and their families. Attention to the issues of recruiting, training, and certifying personnel who staff the intervention teams is critical. The benefits to the field should be substantial given that this attention will have a direct impact on providing effective services. North Carolina's Early Childhood Intervention Service Teams offer one viable blueprint to other states who are beginning to wrestle with the issues.

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